

Table of Contents

CHAPTER 1. PURPOSE AND NEED FOR ACTION	1
1.1 Proposed Action.....	1
1.2 Need for the Action	1
1.3 Relevant Statutes, Regulations, and Other Plans	1
1.3.1 Relationship to Other Actions.....	2
1.4 Issues, Public Scoping.....	2
1.4.1 Summary of Issues	2
1.4.2 Coordination with Agencies and Other Organizations.....	2
1.4.3 Scoping Process	2
1.4.4 Compliance with Other Federal Environmental Statutes	2
1.5 Project Area	3
CHAPTER 2. ALTERNATIVES.....	5
2.1 No Action	5
2.2 Proposed Action.....	5
CHAPTER 3. AFFECTED ISSUES AND ENVIRONMENTAL RESOURCES	6
3.1 Introduction.....	6
3.2 Surface Water Resources.....	6
3.2.1 Hydrologic Setting	6
3.2.2 Streamflow.....	9
3.3 Groundwater Resources.....	17
3.4 Biological Resources.....	17
3.4.1 Aquatic Communities.....	17
3.5 Riparian Resources.....	18
3.5.1 Plant Communities	18
3.5.2 Non-Native Invasive Plant Species	19
3.5.3 Wildlife	19
3.6 Threatened and Endangered Species	20
3.7 Cultural Resources	24
3.8 Environmental Justice	26
3.9 Indian Trust Assets	26
CHAPTER 4. ENVIRONMENTAL CONSEQUENCES.....	26
4.1 Direct And Indirect Effects.....	27



4.1.1 Surface Water Resources.....	27
4.1.2 Groundwater Resources.....	29
4.1.3 Biological Resources.....	29
4.1.4 Riparian Resources.....	30
4.1.5 Threatened and Endangered Species	30
4.1.6 Cultural Resources	31
4.1.7 Environmental Justice	31
4.1.8 Indian Trust Assets.....	32
4.2 Cumulative Effects.....	33
4.2.1 General Considerations for Cumulative Effects.....	33
4.2.2 Surface Water Resources.....	35
4.2.3 Groundwater Resources.....	36
4.2.4 Biological Resources.....	37
4.2.5 Riparian Resources.....	37
4.2.6 Threatened and Endangered Species	37
4.2.7 Cultural Resources	38
4.2.8 Environmental Justice	38
4.2.9 Indian Trust Assets.....	38
4.3 Unavoidable Adverse Effects	39
4.4 Irreversible and Irrecoverable Commitment of Resources.....	39
CHAPTER 5. MITIGATION MEASURES	40
CHAPTER 6. LIST OF PREPARERS AND CONTRIBUTORS	40
CHAPTER 7. BIBLIOGRAPHY.....	40

List of Tables

Table 1. Summary of Reservoir Data	6
Table 2. Non-Native Invasive Plant Species	19
Table 3. Santa Fe County Special Status Plants and Animals That Could Occur Within the Project Area.....	21

List of Figures

Figure 1. Project Area	4
Figure 2. Monthly Average Streamflows in Rio Chama Below Abiquiu Dam.....	10
Figure 3. Maximum Daily Flows in Rio Grande at the Otowi Gage, 1900-2000.....	11



Figure 4: Average Monthly Flow (cfs) at Otowi Gage (1990-1962 and 1963-2001)	12
Figure 5: Average Seasonal Flow (cfs) at the Otowi Gage, 1963-2001.....	13
Figure 6: Turbidity Data Recorded at Otowi Bridge (Jan 1990-Sep 2001).....	15
Figure 7: Suspended Sediment Data Recorded at Otowi Bridge (Jan 1990-Sept 2001)	15
Figure 8: City of Santa Fe Existing Water System	16
Figure 9: Southwestern Willow Flycatcher Critical Habitat	25

